

# Paraganglioma of the Urinary Bladder - A Rare Tumor

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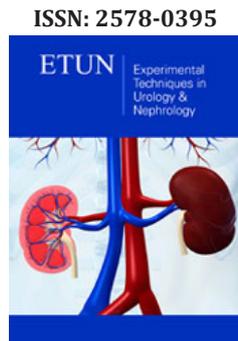
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## Introduction

Approximately 10% of the tumors from chromaffin cells occur at extra adrenal sites [1]. Extra adrenal pheochromocytomas are known as paragangliomas. Primary paraganglioma of the urinary bladder is rare making up less than 0.05% of all bladder neoplasms [2]. It has been postulated that bladder paragangliomas arise from Embryonic rests of chromaffin cells within the bladder wall. They are commonly situated at the dome or the trigone of the bladder [2,3]. The most common symptoms are paroxysmal hypertension headache, sweating and palpitation [4]. The other symptoms commonly reported is haematuria (50-60%) [5], though this is not specific for paraganglioma.

## Material and Methods

We report a 32 years female presented with total painless gross haematuria for 2 months duration. Physical examination was normal. Cystoscopy showed a solid tumor (2x2cm) on the posterior wall of the bladder (Figure 1).



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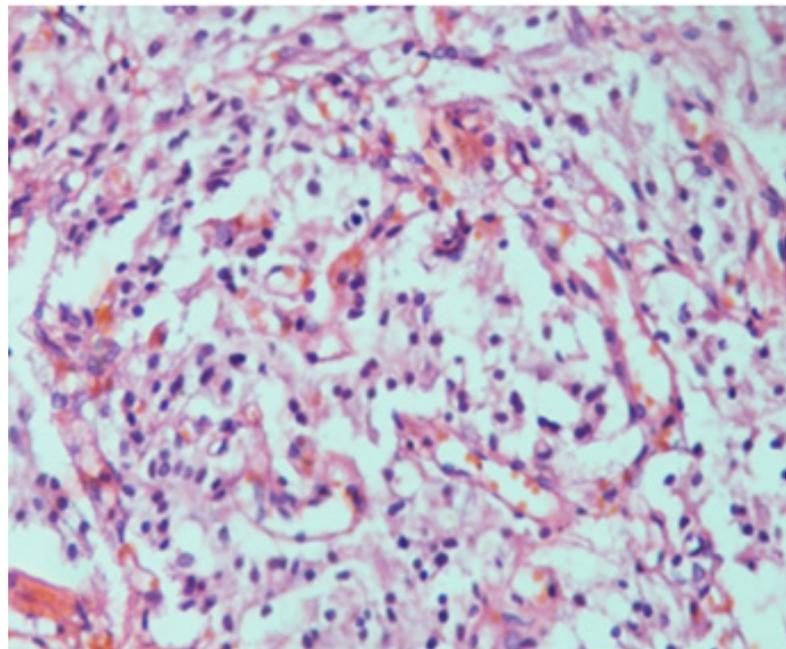
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**Figure 1:** Photomicrograph showing zellballen arrangement of tumor cells with abundant clear cytoplasm, characteristic of paraganglioma (H&E stain, 400x).

## Result

- I. TURBT (Transurethral resection of bladder tumor) was done Operative findings were as follows: 2x2 cm solid tumor on the posterior wall of the urinary bladder. RUO-normal, LUO not visualized. Complete resection of the tumor done.
- II. Histopathological report of the biopsy specimen showed neuroendocrine cells with some typical zellballen appearance (Figure 1).

III. Staining was strongly positive for chromogamin and S-100. Post-operative period was uneventful.

### Conclusion

I. Paraganglioma of the urinary bladder is a rare tumor. Approximately 10% of the bladder paragangliomas are malignant with one or more local invasion, regional lymph node metastasis or distant spread.

II. Clues to early diagnosis may perhaps include a characteristic Cystoscopic appearance though this has not been specifically, Investigated in the literature to date.

III. Due to low prevalence of these tumors this is something that will likely rely on further assessment of case reports in the future to establish.

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